



# ELECTRICAL CURRENTS

Newsletter from the Office of the Chief Electrical Inspector

Ron Fuller, Chief Electrical Inspector

Vol. 6 No. 7

July 2003

## ● Technical Advisory Committee Membership

The following individuals made application and were selected to serve on the WAC Technical Advisory Committee for the 2003-2004 rules development cycle. See the special April, May, and June issues of ELECTRICAL CURRENTS (available on the electrical website) for WAC development details.

POSITION	PRIMARY	ALTERNATE	POSITION	PRIMARY	ALTERNATE
<i>Consumer</i>	Mike Drennon	Craig Gresham	<i>Spec. Elec. Contr.</i>	Karen Peacey	Eric Lodjic
<i>Training School</i>	Paul Baeder	Burt Ross	<i>Spec. Elec. Contr.</i>	Miles Breneman	Colin Smith
<i>CEU Provider</i>	Christine Porter	Peg Reynolds	<i>Spec. Elec. Contr.</i>	J. R. Inman	Jerry Stonebridge
<i>Elec. Engineer</i>	Robert Schneider	Michael Case	<i>Journeyman Elec.</i>	Wayne Whitcomb	
<i>Manufacturer</i>	Joe Andre	Paul Riter	<i>Journeyman Elec.</i>	Janet Lewis	Jack Eidukas
<i>Testing Lab</i>	Jim Pierce	Chuck Mello	<i>Journeyman Elec.</i>	Tony Lewis	Dennis Williamson
<i>L&amp;I Inspection</i>	Don Millar	Jack Knottingham	<i>Journeyman Elec.</i>	Bill Bowser	Douglas Barnard
<i>L&amp;I Inspection</i>	Tim Hingtgen	Jim Hinrichs	<i>Journeyman Elec.</i>	Mike Grunwald	Chuck Paul
<i>City Inspection</i>	Bob Lloyd	Dick Alford	<i>Journeyman Elec.</i>	Bob Vandecar	
<i>Gen. Elec. Contr.</i>	Leonard Whalen	Dan Newton	<i>Specialty Elec.</i>	Doug Griffith	Randall Snell
<i>Gen. Elec. Contr.</i>	Jessica Ward	Paul Gray	<i>Specialty Elec.</i>	Dale Wentworth	Robert West
<i>Gen. Elec. Contr.</i>	Tom Gibelyou	Jim Fox	<i>Specialty Elec.</i>	Bill Neal	Mike Brewer
<i>Gen. Elec. Contr.</i>	Jerome Geissler	Mike Hjelseth	<i>Electric Utility</i>	Dave Hanson	Cliff Sears
<i>Gen. Elec. Contr.</i>	Barry Sherman	Larry Stevens	<i>Telecom Utility</i>	Jon Cornelius	Kevin Wilson

## ● ATTENTION! APPLIANCE REPAIR PERSONS WITH 07B CERTIFICATION

When the effort to bring the appliance repair industry into compliance with the law was initiated, the only appropriate certification choices were 07-Nonresidential Maintenance and 07B-Residential Maintenance. Statute changes in 2002 enabled the creation of the 07D-Appliance Repair specialty. Many individuals that applied early and passed the 07B examination(s) would have opted for the more appropriate 07D certification if it existed at the time.

We have reviewed the 07B examination(s) outline and exam questions and determined that the code, theory, and safety knowledge demonstrated by successfully passing the previous 07B exam(s) is comparable to the knowledge that will be verified in the new 07D-Appliance Repair examinations.

We intend to be fair to the individuals that came into compliance at the first opportunity. Through December 31, 2003, we will allow 07B contractors, administrators, and electricians to “convert” their license or certification to 07D-Appliance Repair without examination or additional fees. You must request this one-time, irreversible conversion in a letter to Electrical Licensing and Certification, P.O. Box 44460, Olympia, WA 90504-4460. Separate letters must come from the individual electrician, administrator, or contractor and must include the existing certificate or license number and the candidate’s signature. Contractors, electricians, and administrators who want to retain their 07B status and become combination certified (07B-07D) must make a new application, pay the appropriate fees, and pass the 07D examination(s).

## ● Emergency Disconnects At Motor Fuel Dispensing Facilities

2002 NEC 514.11 requires emergency disconnecting for fuel dispensers and remote pumping systems and stipulates the controls must be acceptable to the “*authority having jurisdiction*” for both disconnecting and resetting the control circuit. This requirement applies to all station dispensers **including: diesel, kerosene, compressed/liquified natural gas, and liquefied petroleum gas (propane).**

WAC 296-46B-514 011(2) further clarifies: “*An emergency disconnecting means or operator must be provided to disconnect the pump or dispensing equipment serving gasoline, volatile flammable liquids, or liquefied flammable gases. The emergency disconnecting means or operator must disconnect all conductors of the circuit supplying all station dispensers and/or pumps (including the grounded*

*conductor) simultaneously from the source(s) of supply.” All of these products have the capacity to either support combustion or initiate an explosion in the event of an accident. WAC 296-46B 514 011(4) further clarifies the acceptable means for disconnecting and resetting the control circuit. Installers should become familiar with all requirements of NEC 514 and WAC 296-46B before making these installations.*

### ● **ATTENTION! Electrical Specialty Training Program Providers And Students**

Effective with the May 23, 2003 adoption of WAC 296-46B-971, graduates from electrical specialty training programs (from a Washington state public community or technical college, not-for-profit nationally accredited technical or trade school licensed by the work force training and education coordinating board) may receive credit for work experience towards electrician exam eligibility.

Training school programs must be approved **before** graduates request credit for work experience hours toward electrician certification. **Until December 31, 2003**, existing electrical training programs may apply for **retroactive approval** of their program to determine the number of hours that may be credited for program graduates. If the specialty electrical training program applies before December 31<sup>st</sup> and is approved, students that successfully completed the program after January 1, 2000 may receive work experience credit. If you are an electrical specialty trainee affected by this change, contact the school you attended to see if they have submitted the training program to the department for approval.

### ● **“Grandfathering” Equipment Repair Certification**

As of May 20, 2003, Engrossed Substitute Senate Bill (ESSB) 5713 allows qualifying individuals to receive the new 07E equipment repair specialty electrician certification without examination. Qualifying experience for “grandfathering” must be obtained performing equipment repair-type work. Scope of work for the equipment repair specialty is defined in rule [WAC 296-46B-920(2)(I)].

All individuals who wish to receive 07E certification without testing must complete an **Application for Equipment Repair Specialty Electrician Certification Without Examination** and pay the appropriate certification fee **before December 1, 2003**. Persons who qualify are those who:

- Provide evidence that they have successfully completed an apprenticeship program approved under chapter 49.04 RCW for the machinist trade, or
- Provide evidence they were employed as of April 1, 2003, by a factory-authorized equipment dealer or service company and have worked doing equipment repair for a minimum of 4,000 hours. (An individual’s application must include an attachment that documents an employer’s “factory-authorized” status.)

The ability to receive this certification without examination applies only to the specialty electrician certification, **not** to specialty administrator certification. 07E specialty contractors may initially have an assigned “temporary” administrator. The assigned individual must obtain certification by examination within 12 months.

### ● **Electrical Question of the Month**

**This Month’s Question:** A bare #4 copper conductor installed near the bottom of a concrete foundation or footing that is in direct contact with the earth may be used as a grounding electrode when the conductor is at least \_\_\_\_\_ ft in length. **A) 25, B) 10, C) 15, D) 20.**

**Last Month’s Question:** Where single conductor cables comprising each phase or neutral of a circuit are connected in parallel in a cable tray, the conductors shall be installed \_\_\_\_\_ to prevent current unbalance in the paralleled conductors due to inductive reactance. **A) in groups consisting of not more than three conductors per phase or neutral, B) in groups consisting of not more than one conductor per phase or neutral, C) as individual conductors securely bound to the cable tray, D) in separate groups.** The answer is: **B)** [NEC 392.008(D)]